



AMENDMENTS

Please amend the above identified application as follows:

In The Claims

Please cancel claims 1-35, 37, 40, 43, 45, 49, 51 and 52 without prejudice or disclaimer.

Please amend claims 36, 38, 39, 41, 42, 44, 46, 47, 48 as follows:

- 1 36. (Amended) A printed circuit board comprising:
2 a printed wiring board;
3 a plurality of components mounted on said printed wiring board; and
4 an electrically continuous conformal coating for providing an EMI-impervious
5 shield conformingly coating the printed circuit board, including,
6 a conductive coating that prevents the electromagnetic waves from passing
7 therethrough, said conductive coating conformingly adhered to the surface of one
8 or more regions of the printed circuit board, wherein said conductive coating of
9 each said region is electrically connected to each other, and
10 a dielectric coating interposed between said conductive coating and
11 predetermined portions of each said printed circuit board region, wherein said
12 dielectric coating completely insulates said predetermined portions of said printed
13 circuit board region.
- 1 38. (Amended) The printed circuit board of claim 36, wherein said one or more regions of
2 said conformal coating are physically contiguous.
- 1 39. (Amended) The printed circuit board of claim 36, wherein said printed circuit board
2 comprises:
3 a plurality of ground pads mounted in said printed wiring board, wherein said
4 conductive coating is connected electrically to said ground pads;
5 a ground plane disposed in said printed wiring board; and
6 a ground via connected to said ground pads and said ground plane.

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1 41. (Amended) The printed circuit board of claim 39, wherein said printed circuit board
2 further comprises:

3 a shielded connector mounted on said printed wiring board, said shielded
4 connector connected to a shielded cable through which signals travel,
5 wherein said ground pads comprise a ground moat mounted on printed wiring
6 board substantially around said shielded connector and connected electrically to a shield
7 of said connector and to said ground plane.

1 42. (Amended) The printed circuit board of claim 36, wherein said regions of said
2 conformal coating comprise:

3 a first region coating at least a portion of a top surface of said printed circuit
4 board; and
5 a second region covering at least a portion of a bottom surface of said printed
6 circuit board.

1 44. (Amended) The printed circuit board of claim 42, wherein said printed circuit board
2 has edge plating connected electrically to said first and second regions of said conformal
3 coating, wherein said edge plating is electrically connected to a ground plane of said
4 printed wiring board.

1 46. (Amended) The printed circuit board of claim 42, wherein said electrical connection
2 between said first and second regions is provided by a combination of:

3 a first ground strip mounted on said top surface of said printed wiring board;
4 a second ground strip mounted on said bottom surface of said printed wiring
5 board; and
6 a plurality of ground vias disposed in said printed wiring board to connect said
7 first and second ground strips spaced around said printed wiring board so as to contact
8 said first and second ground strips.

1 47. (Amended) The printed circuit board of claim 42, wherein said electrical connection
2 between said first and second regions is provided by a plurality of electrically conductive

3 spring clips spaced around said printed wiring board to be electrically coupled with said
4 conductive coating of said first region and said conductive coating of said second region.

1 48. (Amended) The printed circuit board of claim 36, wherein said printed wiring board
2 comprises signal traces formed on the surface thereof, wherein said dielectric coating and
3 said signal traces are constructed and arranged such that said surface signal traces have a
4 desired characteristic impedance.

1 50. (Amended) The printed circuit board of claim 36, wherein one or more components
2 are coated individually with said conformal EMI shield, wherein said conformal EMI
3 shield which coats the one or more components is electrically connected to said
4 conformal coating on said printed circuit board.

Please add the following new claims 53-70:

1 53. (New) The printed circuit board of claim 36, wherein said dielectric coating is
2 comprised of a dielectric material that is thermally conductive.

1 54. (New) The printed circuit board of claim 36, wherein said dielectric coating has a
2 combination of adhesion and viscosity that enables said dielectric coating to be applied
3 with atomization spray techniques so as to access and adhere to exposed surfaces of said
4 one or more regions of the printed circuit board.

1 55. (New) The printed circuit board of claim 54, wherein said dielectric coating is
2 comprised of a plurality of successively-applied layers of dielectric material.

1 56. (New) The printed circuit board of claim 36, wherein said dielectric coating is
2 thixotropic.

1 57. (New) The printed circuit board of claim 36, wherein said dielectric coating has a
2 viscosity of at least 45" #2 Zahn Cup (full body).

1 58. (New) The printed circuit board of claim 36, wherein said dielectric coating has a
2 viscosity of 50-100" #2 Zahn Cup (full body).

1 59. (New) The printed circuit board of claim 36, wherein said dielectric coating has a
2 viscosity of 70-95" #2 Zahn Cup (full body).

1 60. (New) The printed circuit board of claim 36, wherein said dielectric coating has an
2 adhesion that enables it to pass the ASTM D-3359-83 Method A Tape Test using a 1" (25
3 mm wide) semi-transparent pressure-sensitive tape with an adhesion strength of 25-70
4 ounces per inch.

1 61. (New) The printed circuit board of claim 60, wherein said dielectric coating has an
2 adhesion that enables it to pass the ASTM D-3359-83 Method A Tape Test using a 1" (25
3 mm wide) semi-transparent pressure-sensitive tape with an adhesion strength of 25-70
4 ounces per inch when tested in accordance with ASTM Test Method D-3330.

1 62. (New) The printed circuit board of claim 60, wherein said dielectric coating has an
2 adhesion that enables it to pass the ASTM D-3359-83 Method A Tape Test using a 1" (25
3 mm wide) semi-transparent pressure-sensitive tape with an adhesion strength of 30-50
4 ounces per inch when tested in accordance with ASTM Test Method D-3330.

1 63. (New) The printed circuit board of claim 36, wherein said dielectric coating is formed
2 from multiple applications each forming a layer of dielectric coating approximately 1 mil
3 thick.

1 64. (New) The printed circuit board of claim 36, wherein said conductive coating has a
2 viscosity of 10-40" Zahn cup #3.

1 65. (New) The printed circuit board of claim 64, wherein said conductive coating has a
2 viscosity of 15-30" Zahn cup #3.

1 66. (New) The printed circuit board of claim 36, wherein said conductive coating has an
2 adhesion that satisfies ASTM 5B rating.